

Appl. No. : 10/634,175
Filed : August 4, 2003

AMENDMENTS TO THE CLAIMS

Please cancel Claims 2 and 4-10 without prejudice.

Please amend Claim 1 as follows.

Please add Claims 11-12 as follows.

1. (Currently amended) A method of manufacturing an internal grooved tube comprising the steps of:

inserting a grooved plug having a large number of fine spiral grooves on the outside surface into a blank tube rotatably; and

pressing the peripheral wall of the blank tube against the outside surface of the grooved plug with several balls revolving both around the circumference of the blank tube and on its axis in a location of the grooved plug inserted, while drawing out the blank tube longitudinally in one direction;

wherein the number of balls is limited to 2 to 3, and wherein a lead angle Θ of said grooves of the grooved plug to the axis is limited to 26 to 45 degrees.

2. (Cancelled)

3. (Original) A method of manufacturing an internal grooved tube according to claim 1, wherein the direction of revolution of the balls is allowed to match the direction of rotation of the grooved plug.

4-10. (Cancelled)

11. (New) The method of Claim 1, wherein the ratio of a groove width W in the tube axial direction to a groove height H is in the range of 1 to 2.

12. (New) The method of Claim 1, wherein the lead angle θ is in the range of 26 to 35 degrees.